

CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

CD NO

COUNTRY East Germany

DATE DISTR. 24 September 1954

25X1

SUBJECT: VEB Transformatoren- und Röntgenwerk (TRARO),
Dresden - Personnel Changes and Development
Projects

NO OF PAGES

PLACE
ACQUIRED

NO. OF ENCLS.
(LISTED BELOW)

639130

25X1

DATE OF INFO

**SUPPLEMENT TO
REPORT NO.**

25X1

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES, WITHIN THE MEANING OF TITLE 18, SECTIONS 793 AND 794, OF THE U. S. CODE, AS AMENDED. ITS TRANSMISSION OR REVELATION OF ITS CONTENTS TO OR RECEIPT BY AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW. THE REPRODUCTION OF THIS FORM IS PROHIBITED.

THIS IS UNEVALUATED INFORMATION

1. In August 1953, Gusemann (inn) who had been appointed manager of the Transformatoren- und Röntgenwerk Dresden by the Soviets, was dismissed. The same happened to Zinn (inn), an SED member and former carpenter, who had become a member of the managing staff of the plant. In August or September 1953, Director Bruno Eitler left the firm, according to an official version, for health reasons. About the same time, Professor Dr. H. Stamm, technical manager of the enterprise, was ordered to set up a College of Electric al Engineering at Ilmenau. He was replaced by Ingenieur Zirkel (inn), an SED member who was formerly a designer in the field of high voltage installations.

Dukas (fnu) worked as an assistant engineer in the plant. In September 1952, chief designer Dunkel (fnu) returned from China where he had been for half a year. In April 1954, Dunkel was manager of the enterprise. Beckmann (fnu) worked at the Designs Bureau. Professor Stamm had induced Ingenieur Sinkwitz (fnu) an expert in the field of high-power transformers of the TRO plant in East Berlin to come to Dresden.

2. The large building for the high voltage department was completed in September 1953. Except for a small crane, the machinery required had not been installed in April 1954. The workshop was mainly used for storage and packing purposes. Two 500 kVA engines (sic) required for the department were scheduled to be built at the Sachsenwerk Plant in Niedersiedlitz.

3. The April 1954 status of the development work ordered in 1952

- a. Project 1: "Development of a single member for the direct current installations; development of a multiple valve fitted on the vacuum pump used for these installations; development of one betatron for 10 and one for 20 megavolts. Work on this development order was discontinued after Professor Stamm left the firm. Ingenieur Zirkel does not

THIS SPECIAL OFFER LIMITED TO 1000 COPIES ONLY

[illegible]

CONFIDENTIAL

- U.S. OFFICIALS ONLY

25X1

- 2 -

used in the factory's extra high voltage test field headed by Stamm. The engineers still working at the firm could not overcome the difficulties involved in the development work mentioned. Reference was made to the fact that the August 1953 production plan of the firm was fulfilled only 20 percent. Information dating from April 1953 indicated that the work on the development of betatrons and installations designed for linear acceleration of electrons did not make much progress.

- b. Project 2: "Development of a high voltage test transformer for 1,000 kV and of a combined current and voltage transformer for 220 kV". It is believed that this development work was interrupted by Dunker's trip to China. Information dating from April 1954 indicated that work was being done on the two apparatus, but details were not available.
- c. Project 3: "Development of a portable differential bridge designed for direct fault-reading". It is doubted that there was an urgent requirement for the development of this equipment.
- d. Project 4: "Development of a transformer for 220 kV". It is possible that this development order was given to the enterprise as a result of special efforts made by Professor Stamm. One of the reasons for these efforts may have been the consideration that special monetary allocations are granted for development work.

25X1

25X1

Work on the development of this transformer had been unsuccessful. This did not appear surprising in view of the fact that 110 kV transformers tested at the plant in September 1953 did not stand the tests, allegedly because of inadequate insulating material. Work on the development of 220 kV transformer has been conducted at the TRO plant in East Berlin for 20 years. The Berlin plant is better equipped and better suited for development work on transformers for very high voltages.

- e. Project 5: "Research work on processes occurring in rectifier plants utilizing mechanic and valve-steered rectification". (sic). This development work may be expected to reach positive results only when the Thuringia Valve Plant or the Siemens Valve Plant is in a position to furnish new types of valves. The development work may be supervised by Dr. Winter (firm), a former assistant to Professor Guenther-Schulze who, while at the Dresden Institute of Technology, made experiments with rectifying plants. (sic).
- f. Project 6: "Further development of pressure gas condensers for 500 MW". Pressure gas condensers of this capacity can be bought at the Hartmann and Braun firm at Frankfurt/Main. It was, therefore, believed that the new development of this equipment in Dresden was uneconomical.
- g. Project 7: "Development of high voltage condensers utilizing organic insulating materials." Porcelain high voltage condensers were previously manufactured at the Hesco firm in Hermsdorf. This firm was still in a position to furnish porcelain high voltage insulators. In giving this development order, the Dresden firm may have been influenced by development work made in this field by Swiss firms.

25X1

CONFIDENTIAL

- U.S. OFFICIALS ONLY

CONFIDENTIAL

- U.S. OFFICIALS ONLY

25X1

- 3 -

- h. Project 8: "Development of an X-ray apparatus for 400 kV". Details were not available. Apparatus of this kind are being built in the USSR.
- i. Project 9: "Further development of an X-ray apparatus for 200 kV". Development work in this field was expected to continue according to schedule.
- k. Project 10: "Further development of a direct voltage high voltage cascade". Work on this development order was interrupted.
- l. Project 11: "Betatron and cyclotron projects". No information was available. Generally, it can be stated that development work at the Dresden Roentgen- und Transformatorenwerk was greatly hampered by a shortage of materials and qualified experts.
4. According to a September 1953 issue of the Czech magazine "World of Technology", work on the development of a prototype of a transformer for 400 kV had been completed at the Leningrad "Elektroapparat" Works. The development work for this transformer which was scheduled to be installed on the long-distance high voltage line from Kuityshev to Moscow was done by Leningrad and Moscow engineers in conjunction with the M.I. Kalinin Institute of Technology and the All-Union Scientific Institute of the Cable Industry. Source doubted that the USSR was in a position to build a useful 400 kV transformer although he believed it possible that a prototype transformer had been constructed in the USSR.

The Transformatoren- und Roentgenwerk Dresden previously tried to solve the problem of building a usable 400 kV transformer. This work was unsuccessful. From 1950 to 1952, an engineer of the "Karl Liebknecht" Transformer Plant, formerly Transformatorenwerk Berlin-Oberschoeneweide (TRO), made designs for 220 kV transformers at the Dresden plant. In early April 1954, this engineer returned to the TRO plant.

Comments:

1. Not further identified by source.
2. Hartmann & Braun A.G., Frankfurt/Main, Falkstrasse 5.

CONFIDENTIAL

- U.S. OFFICIALS ONLY